

***Your No.1 Innovative Partner***  
***Leading Company of the***  
***Weather Solution***



**INNOQUEST**

주식회사 이노퀘스트

## INNOQUEST provides Total Weather equipment to developing countries using various funds such as KOICA of ODA.

The Innoquest has executed many projects mainly developing hardware design & s/w programming of data logger.

The company is going to particularly strengthen dominate position in the weather-related area for future.

Also, the company is extending the business to the sales, installation and maintenance.

Based on the capability and technologies accumulated, the company is responding to the requirements of the rapidly changing 21st century ICT environment.

- 2021 ----- 05 Certification of international Contractor
- 2020 ----- 01 Register Weather business provider
- 03 R&D Lab was established
- 05 Obtain Certification of Venture Company
- 06 Installation of Flood Forecasting and Early Warning System (FFEWS) in Marikina -Pasig river.
- 07 Participated in IOT business
- 09 Patent register - An apparatus for measuring water level using resistance measuring method of interval of electrodes and method thereof
- 2019 ----- 11 INNOQUEST established (Separate from Meteorological Division of the Jubix)
- 2018 ----- 01 Installation of Meteorological Observation and Early Warning Systems in Ethiopia
- 2017 ----- 01 Installation of Flood Early Warning Systems for Disaster Mitigation in Greater Metro Manila
- 2015 ----- 04 Installation of Flood Forecasting and Warning Systems in the Citarum river
- 2014 ----- 03 Installation of Automatic Weather Systems in SK Planet
- 2013 ----- 02 Built in Meteorological Division
- 2012 ----- 09 Jubix was established



### SI(System Integration)

- Water Information System
- Weather Information Application System
- Flood Forecasting Warning System



### Weather, Environment, Safety

- Meteorology Measurement Instrument
- Hydrology Measurement Instrument
- Water Quality Measurement Instrument
- Flood Forecasting Warning Instrument



### IoT communication technology

- Weather System Business for M2M
- Secure M2M Industrial Market
- For Applying ICT, Controlled Horticulture



## Data Logger iDLog-120

01



### OVERVIEW

iDLog-120 will be able to hook up all sorts of sensor, collecting and processing the sensor data.

iDLog-120 supplying several I/O ports, is manufactured to customize service you want and it will be able to be adjusted for sensor suite.

### FEATURES

- High performance ARM CPU
- Certified Product from certificate authority
- Supporting all sorts of sensor suite
- Built in Solar charger
- Supporting setting function of I/O sensor suite
- Supporting Wire-Wireless Network
- Management
  - CLI & WMI (Web Management Interface)
  - supply UI to check data collected in real time

### SPECIFICATIONS

- Processor : ARM Cotex-A5 533MHz
- Memory : DDR2 256MB
- Storage : 256MB & Micro SD Card (Until 16GB)
- OS : LINUX 3.10.X
- Communication-Interface :
  - 10/100/1000Mb Ethernet \* 1 port
  - USB 2.0 \* 1 port
- Digital Interface :
  - RS-232 \* 4 ports
  - RS-422/485 \* 2 ports
  - TTL I/O & Low Frequency Pulse counter \* 8 ports
  - Analog Frequency Counter \* 2 ports
- Analog Interface :
  - AD Converter 0~5V 12bit : Single \* 8 ports, Differential \* 4 ports
  - AD Converter -2.5V~2.5V 12bit : Single 8 ports, Differential \* 4 ports
  - Current Driver \* 2 ports
  - Reference Voltage \* 3ports
  - Input Power : 9V ~ 24V
  - Operating Environment :
    - Temperature : -40 ~ 80 °C

## Radar Water Level Sensor IWLRV40

02



### OVERVIEW

The IWLRV40 radar sensor monitors the water level of rivers, lakes. The sensor is ideal for areas where submersed sensors can be damaged due to corrosion, contamination, flood-related debris, lightning, or vandalism. It emits short microwave pulses and then measures the elapsed time between the emission and return of the pulses. The elapsed time measurement is used to calculate the distance between the sensor and the target (for example, water, grain, slurry). The distance value can then be used to determine depth of the medium.

### FEATURES

- Light, compact housing
- Sensor is away from the water, making the installation safer to achieve
- Extremely low power consumption – can be easily used at remote locations
- Non-contact measurement – ideal for flood measurement
- Compact and solid design – long sensor life with minimal maintenance
- Standard interfaces for communication with data loggers

### SPECIFICATIONS

- Measuring range : 0.1 ... 40 m
- Accuracy : ± 0.1 %
- Measuring time: 2...20 seconds;
- Beam angle of antenna (width of beam) : Horizontal 6°, Vertical 6°
- Transmit frequency : 60 GHz
- Power supply : 3.6 ... 16 V
- Interfaces : RS485
- Dimensions : 95mm(L) x 120 mm(W) x 170mm(H)
- Weight : approx. 1.2kg
- Operating temperature : -40 ... +80°C
- Materials : Aluminum pressure die-casting with stainless (Horn)

## Precipitation sensor IRG05

03



### OVERVIEW

The IRG05 is a high-end tipping bucket rain gage with an 200 mm orifice and a heavy-duty cast stainless base. It measures precipitation in 0.5 mm increments. The IRG05 is ideal for locations where intense rainfall events may occur. This tipping bucket is compatible with all any data loggers and is used in environmental monitoring applications

### FEATURES

- More accurate measurement of high-intensity precipitation
- Extra-heavy metal construction for durability and long life
- High precision – tips at 0.5mm increments
- Compatible with most any data loggers
- Accuracy is ±3 percent at high precipitation rates of 300 mm/hr.

### SPECIFICATIONS

- Sensor Type : Tipping bucket
- Accuracy : - ±0.5 % in case of 20mm/hr. or less - ±3 % in case of 20mm/hr. or more
- Rainfall per Tip : 0.5mm
- Measurement Range : 0 to 700 mm/h
- Operating Temperature Range : 0° to 70°C
- Humidity Range : 0 to 100%
- Orifice Diameter : 200mm
- Height : 520mm
- Output signal : Pulse counter

## Wind Direction Sensor IWD100

04



### OVERVIEW

The IWD100 is a counter-balanced, low-threshold, optoelectronic wind vane. Infrared LEDs and phototransistors are mounted on eight orbits on each side of a 8-bit GRAY-coded disc. Turned by the vane, the disc creates changes in the code received by the phototransistors.

### FEATURES

- Low starting threshold
- Great dynamic characteristics
- Strong corrosion resistant ability
- Easy installation
- The sensor is marked with a point in the north(N) direction

### SPECIFICATIONS

- Sensor/Transducer Type : Optical code disc(Gray code 8-bit)
- Accuracy : ±0.7°
- Observation Range : 0 ~ 360°
- Starting threshold <0.5m/s
- Operating Temperature Range : -40° ~ 70°C at wind speed within 75m/s
- Resolution: 1°
- Output : Digital – RS-232 / Analog – 4~20mA(Option)

## Wind Speed Sensor IWS100

05



### OVERVIEW

The IWS100 is a fast response, low-threshold anemometer. Three lightweight, conical cups mounted on the cup wheel, provide excellent linearity over the entire operating range, up to 75 m/s.

### FEATURES

- Low starting threshold
- Strong corrosion resistant ability
- Easy installation

### SPECIFICATIONS

- Sensor/Transducer Type : Cup anemometer/opto-chopper
- Accuracy : (Below 10m/s) – 0.3m/s or better (above 10m/s) – 3% or better
- Observation Range : 0 ~ 75m/s
- Starting threshold <0.5m/s
- Operating Temperature Range : -40° ~ 70°C at wind speed within 75m/s
- Resolution: 0.1m/s
- Output : Analog : Pulse(0~2656Hz) Analog : 4~20mA(Option) Digital : Rs-232(Option)

## Barometric Sensor IBP100

06



### OVERVIEW

The IBP100 barometer is a digital barometer based on a piezoresistive sensor that provides high measurement accuracy and superior long-term stability. 2sensors are used to continuously compare readings from the barometer pressure sensor with each other and determine if it is within the set criteria to provide reliable observation data.

The offset value can be applied directly to the sensor so that there is no deformation of the barometric pressure value when replacing the data logger

### FEATURES

- Installation on the inside wall of the main data logger cabinet
- Designed to circulate air to the outside by opening a hole for barometric pressure measurement
- Attaching the local display to the barometric pressure sensor

### SPECIFICATIONS

- Sensor/Transducer Type : Piezoresistive
- Accuracy : ±0.5hPa(500~1100hPa)
- Observation Range : 400hPa ~ 1200hPa
- Long-term stability : 0.1hPa/year
- Interface : RS-232C
- Response speed : Within a second

## Humidity Sensor IHP110

07



### OVERVIEW

IHP110 is a trouble-free and cost-effective humidity transmitter with high accuracy and good stability. It is suitable for volume applications or integration into other manufacturers' equipment. HMP110 is also suitable for glove boxes, greenhouses, fermentation and stability chambers, data loggers, and incubators.

### FEATURES

- Miniature-size humidity transmitter
- Low power consumption
- Fast start-up for battery-powered applications
- Cable detachable with standard M8 quick connector
- IP65 metal housing
- supply UI to check data collected in real time

### SPECIFICATIONS

- Measurement range : 0~100%RH
- Accuracy : - 0~40°C : ±1.5%RH(0~90%RH), ±2.5%RH(90~100%RH) - 40~0°C and 40~80°C : ±3.0%RH(0~90%RH), ±4.0%RH(90~100%RH)
- Temperature Measurement range : -40~80°C
- Accuracy : 0~40°C : ±0.2°C -40~0°C and 40~80°C : ±0.4°C
- Input and outputs Power consumption : 1mA average, mx. Peak 5mA
- Operating voltage : With 1V/2.5V output 5~28VDC, with 5V output 8~28VHD
- Output : 2Channels : 0~1VDC / 0~2.5VDC / 0~5 VDC / 1~5VDC 1Channel loop-power converter : 4~20mA



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